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10/616,668	07/09/2003	Bruce G. Johnson	10012473-3	2599

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EXAMINER
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ART UNIT	PAPER NUMBER
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**GROUP 2800**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/616,668  
Filing Date: July 09, 2003  
Appellant(s): JOHNSON, BRUCE G.

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Johnson Bruce  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4/13/06 appealing from the Office action mailed 11/15/05.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

EP 530627

Takei

10-1993

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 33, 38-41, 51 stand rejected under 35 U.S.C. 102(b) as being anticipate by Takei (EP 530627).

With respect to claims 33, 41 and 51, Takei discloses a method of printing with an ink jet comprising:

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- A supply of ink liquid ink comprising a carrier fluid (Fig.4: element 23C, M Y)
- An ink jet head using the ink for printing images on a transfer belt (column 11: line 45) that is adjacent to the print head and moveable with respect to the print head (Fig.4, Abstract);
- Absorbing carrier fluid from ink of the image with the transfer member (since the transfer member has a absorbing layer, it will absorb carrier fluid from ink of the image)
- Heating the transfer drum (Column 5: line 45-49)
- The transferring the printed image from the transfer member to a sheet of the print medium (Fig.4: element S); and since there is charge includes in the embodiment of figure 4, therefor this method does not includes applying a charge to a surface of the carrier fluid on the transfer member.
- Wherein the transfer member is a transfer belt (Column 11: line 44-45) and the method further comprises absorbing carrier fluid from ink of the image with the transfer belt (Column 5: line 45-49)

With respect to claim 38, Takei discloses ink jet head comprises a page width array (Fig.4: element 23).

With respect to claim 39, Takei discloses cleaning the transfer member after transfer of the image to the sheet of the medium (Fig.4: element 22)

With respect to claim 40, Takei discloses a pinch roller for facilitating transfer of an image from the transfer member to the sheet of print medium (Fig.4: element 25).

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With respect to claim 43, Takei discloses that wherein the electrical charge facilitates transfer of the images to the print medium (Column 10: line 1-10)

With respect to claims 44 and 52, Takei discloses an ink jet printing system comprising:

- Ink comprising a carrier fluid (Fig.1: element 1)
- An ink jet head (Fig.8: element 53) using the ink for printing images on a transfer member (Fig.8: element 51) that is adjacent to the print head and moveable with respect to the print head.
- The transfer member disposed to transfer an image to the print medium (Fig.8: S)
- Wherein the electrical charge facilitates transfer of the images to the print medium (Column 10: line 1-10)

With respect to claim 45, Takei discloses the transfer member comprises a transfer belt (Column 11: line 44-46)

With respect to claim 46, Takei discloses transfer member comprises a drum (Fig.8: element 51).

With respect to claim 49, Takei discloses a pinch roller for facilitating transfer of an image from the transfer member to the medium (Fig.8: element 55).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2853

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 37 and 47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takei (EP 530 627).

Takei in the embodiment 4, figure 4 discloses the claimed invention except that using full line head instead of scanning head. Takei in embodiment 3, figure 3 shows that full line head and scanning head is an equivalent structure known in the art. Therefore, because full line head and scanning head were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute scanning head for full line head for the same purpose of ejecting ink.

3. Claims 48, 50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takei (EP 530 627).

Takei in embodiment 8, figure 8 fails to teach a cleaning roller for cleaning the transfer member and heating element for heating the transfer member.

Takei in embodiment 4 teaches the cleaning roller (Fig.4: element 22) for cleaning the transfer member and heating element (figure 4: element 27) for heating the transfer member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cleaning roller and the heating element as taught by

Takei in embodiment 4. The motivation of doing so is to remove residual ink on the transfer roller and release absorbed water on the transfer member.

#### ***Allowable Subject Matter***

4. Claims 53-58 are allowed.

The primary reason for the allowance of claim 53-58 is the inclusion of the limitation of method of printing with an ink jet printing system comprising adjusting a speed of movement of the transfer member to maximize evaporation of the carrier fluid. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

#### ***Response to Arguments***

Appellant argues that Takei does not teach that the electrical charge facilitates transfer of the images to the print medium. This argument is not persuasive because Takei teaches the electrical charge causes the ink transfer onto the recording medium (Column 10: line 1-10). Appellant argues that the electrical charge only causes the image to adhere more strongly to the transfer member rather than facilitating the transfer to the print medium. However, Appellant has failed to recognize that a stronger adhesion to the transfer member ultimately facilitates a better transfer onto the recording medium. Takei explicitly teaches "ink can be condensed without reduction of speed, change in temperature or other steps." (Column 10: line 11-15). This meets

Appellant's broad claim recitation "wherein said electrical charge facilitates transfer of said image to the print medium." Appellant has failed to consider that Takei's invention is to prevent high-speed loss of the color particles from the transfer member before the color particles are transferred to the medium. Clearly Takei's invention is to "facilitate" transfer to the medium.

Appellant further argues that Takei does not teach heating the transfer belt that absorbs carrier fluid to facilitate removal of the carrier fluid from an image on the transfer belt and Takei does not ever teach or suggest heating the belt as recites in claim 33. This argument is not persuasive because Takei explicitly teaches replacing the drum with a belt (Column 11: line 44-45). Since the drum has a polymer on the outer surface as a surface layer, in order to replace the drum with the belt, the belt would have the same polymer material in order to have the same property and same function as the drum. By heating the transfer drum the water is released from the polymer layer in the transfer polymer drum, and this facilitates removal of the carrier fluid from the image on the transfer polymer belt. Since the polymer is designed to be heated, heating the polymer drum must heat the polymer belt, which in turn must heat the ink. The Examiner agrees that the polymer belt is not directly heated, but such limitation is not claimed.

Applicant also misrepresents Takei by stating: "Takei only teaches heating a transfer drum for the purposes of filling a solvent "recovering tank". Takei's intent is ultimately to transfer ink to the medium S, not merely to move ink from the jets to the recovering tank. The recovery tank is provided for purpose of catching left over solvent

wasted. If Applicant merely wanted to fill the tank as Appellant suggests, one would not need such a complicated procedure to do so.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte dismissal of the appeal* as to the claims subject to the new ground of rejection:


(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.


(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).


Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

An appeal conference was held on May 25, 2006 with the following conferees:

Respectfully submitted

Mr. Stephen Meier, SPE 

  
**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**

Mr. Dunn Drew, SPE 

Ly Tran, Examine

